

The Future of Kentucky's Forests

EQC Forestry Roundtable

Summary and Actions



Prepared by
The Kentucky Environmental Quality Commission
March 2005

Commonwealth of Kentucky

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is a seven-member citizen board created under state law with a mission to:

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- promote partnerships to improve and protect the environment for future generations, and
- serve as an advisory board to state officials on environmental matters.

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Forest Resources of Kentucky

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Forest Resources of Kentucky

Introduction



Introduction

Kentucky's forests make a significant contribution to our quality of life, the integrity of our environment and provide an important economic base for employment, tourism, and recreation while supporting a diverse forest products industry. Forests, which cover half of the state, truly define the unique character of Kentucky's landscape and our culture.

But our forests and our forest economy have undergone changes in the past decade. These changes are a result of a number of factors from increased global demand and market fluctuations to urban sprawl and forest degradation caused by fire, insects and disease.

How are these changes affecting our forests? How do we achieve a balance between the growing need for wood fiber and the protection of the forest resource? What can we do to ensure our forests are productive, diverse and healthy? The Environmental Quality Commission joined with the Kentucky Division of Forestry, the U.S. Forest Service along with Eastern Kentucky University and the University of Kentucky to sponsored a roundtable to consider these questions and help move Kentucky forward toward a sustainable forestry future.

The EQC Forestry Roundtable was held Sept. 9, 2004 at Natural Bridge State Park. The half-day roundtable began with a review and discussion of the preliminary findings of the 2003 USFS Forest Inventory of Kentucky followed by a discussion of forest issues and opportunities. The roundtable was attended by 40 people representing the forest industry, state and federal government, academia, forest landowners, conservation groups, tourism interests and professional forestry consultants.

This paper represents a summary of ideas that emerged from the roundtable and additional ideas generated from comments received during the discussion and through additional research. This paper was prepared by Leslie Cole, Director, Kentucky Environmental Quality Commission.

EQC would like to thank the roundtable members that contributed to this initiative and would especially like to acknowledge the following individuals for their role in providing presentations or facilitating discussion during the EQC Forestry Roundtable.

- LaJuana S. Wilcher, Secretary, Environmental and Public Protection Cabinet
- Dr. William Martin, Director, Division of Natural Areas, Eastern Kentucky University
- Rudean Reynolds, Procurement Manager, Trus Joist
- Dr. Greg Kuhns, Forest Landowner
- Hagan Wonn, Kentucky Society of American Foresters
- Leah MacSwords, State Forester
- Susan Bush, Commissioner, Department of Natural Resources
- Don Girton, Kentucky Woodland Owners Association
- Tom FitzGerald, Kentucky Resources Council

The Forest Resources of Kentucky

Key Challenges

Overview

“I want to take all views together to come up with the best plan, the best direction and the best ideas for preserving, protecting, sustaining and growing and using in a sustainable way the great forests we have here.”

LaJuana S. Wilcher, Secretary
Environmental and Public Protection Cabinet



In 1994 the first Summit on Kentucky’s Forest Resources was convened. The summit was called in response to increased logging of private forestlands and affects on the ecological and economic health of our forests. The summit led to the development of a Kentucky Forest Resource Plan that articulated a vision, identified issues and suggested strategies.

Ten years later many of the forest resource issues identified in the plan remain the same. Issues such as educating the public about the important role of forests and improving management dominated discussions in 1994 as well as in 2004. However, new and more difficult issues have arisen since the 1994 Forest Summit. Consider the following facts:

- On average, Kentucky lost 137 acres of forestland a day between 1988 and 2003 to other uses.
- Timber removals averaged 311.8 million cubic feet annually during the past decade. Trends reveal that timber removal rates have nearly doubled in the past 30 years.
- The primary wood industry in Kentucky was hard hit by the 2001 recession, losing some 173 firms between 2000 and 2001.

Urban and rural sprawl, global competition, new marketplaces and even public perception of forests are among the many drivers of forest change in Kentucky. With the recent completion of the 2003 Kentucky Forest Resource Inventory, the first update since 1988, the state now has an opportunity to study changes to the forest, prioritize issues and develop actions to move Kentucky’s forests into the next century.

Kentucky has accomplished much since the 1994 Forest Summit. The Kentucky Forest Conservation Act of 1998 is a good example of consensus actions which has led to improved harvesting practices on private woodlands. But much work remains to be done ensure the future of our forests. Opportunities to mutually support good jobs, a healthy forest and the vitality of Kentucky’s rural communities will require a sustained effort. This will require new business models and investments, a skilled workforce and proactive approaches that support the long-term vitality and sustainability of the forests and our rural communities. The good news is there is a growing network of government agencies, private landowners, forest industries and conservation groups committed to sustainable forest management. The 2004 EQC Forestry Roundtable provided an opportunity for those groups to come together to discuss common concerns and opportunities and seek proactive measures.

The Forest Resources of Kentucky

Key Challenges

“We tend to think of sustainability as healthy and long term but in reality the biggest challenge today is deforestation and it will be our biggest problem in the future.” Hagan Wonn, Chair, East Kentucky Society of American Foresters

Forestland Loss And Fragmentation

ISSUE -- On average, Kentucky lost 137 acres of forestland a day between 1988 and 2003 to other uses.

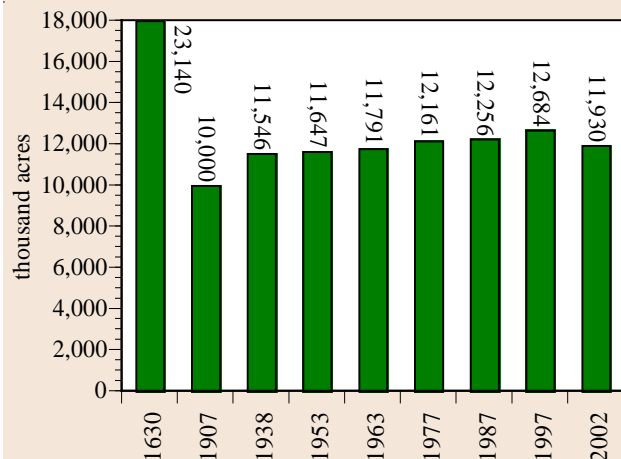
CHALLENGE -- What if any impact is forestland loss and fragmentation having on the forest ecosystem and how do we best maintain the balance between growth and biological diversity.

Background

Kentucky's forestlands dominate our landscape, covering an estimated 11.9 million acres of land or 47 percent of the landbase. Oak-hickory is the predominant forest type in the state, covering 8.4 million acres (72 percent of the timberland). An estimated 306,800 landowners in Kentucky own 10.2 million acres, or 93 percent of the forestland in Kentucky.

Forest and timberland acreage had been increasing in the state during the past four decades. However, the 2003 Forest Inventory of Kentucky revealed that forest land acreage fell by 3 percent or 754,000 acres since 1988. This amounts to the loss of 137 acres of forestland a day between 1988 and 2003 to other uses. Road building, agriculture, mining and urban development all contribute to fragmentation and loss of forestland in Kentucky. The greatest forestland land acreage losses were seen in the Western Coalfields and Bluegrass regions of the state.

Timberland in Kentucky



Source: U.S. Forest Service



Timberland Trends by Ownership in Kentucky

ownership	2002	1988	1977	1963
private ownership	10.28	11.34	11.00	10.77
public	1.05	1.00	.89	.72
industry	.28	.20	.25	.30

*million of acres....timberland is a subset of forestland that is defined as capable of producing 20 cubic feet per acre/year of industrial wood.
Source: U.S. Forest Service

The Forest Resources of Kentucky

Key Challenges

“The forest is getting older and well over ½ of the forest is 40 to 50 years old.”

Jeff Turner, Southern Forest Research Station, USDA

Forest Sustainability

ISSUE -- Kentucky’s forests are now in a period of intense utilization with timber removal rates nearly doubling in the past 30 years.

CHALLENGE -- What impacts will increased demand and intensive logging have on the economic and ecological vitality of Kentucky’s forest resources.

Background

The dominant trend in the past four forest inventories of Kentucky is a gradual transition from young to a mature forest. The USFS 2003 Forest Inventory reveals that Kentucky’s forests have regenerated after a period of the intense logging at the turn of the century. Kentucky has seen a progressive gain in large size trees and an increase in tree volume. For example, in 1975, 44 percent of the timber stands were classified as sawtimber (above 15 inches diameter breast height) compared to 65 percent in 2002.

Timber removals averaged 311.8 million cubic feet annually during the past decade. Trends reveal that timber removal rates have nearly doubled in the past 30 years. According to the U.S. Forest Service, Kentucky is still currently growing more timber than it is removing. Kentucky is growing 1.5 times more volume in timber growing stock than it is removing.

A review of individual species of trees reveal varying growth and removal rates based on market conditions and other factors. For example, red oak and walnut are at or near even growth removal ratios. White oak is growth is 1.5 times the removal rate and yellow-poplar growth is exceeding removals by slightly more. The only species where removals exceed growth was Virginia Pine due to the outbreak of southern pine beetle in 2000-2001 which caused significant mortality across the state.

Annual Net Growth Removal Rates of Selective Timber Species in Kentucky

Species	Net Growth	Removal	G/R ratio
Species where removal exceeds growth rates			
Virginia pine	2.8	9.7	0.3
Species at or near even growth/removal rates			
Red cedar	8.4	8.4	1.0
Walnut	4.7	4.2	1.1
Select red oak	28.8	24.2	1.2
Other red oak	43.9	44.2	1.0
Species where growth exceeds removal rates			
Beech	9.6	6.7	1.4
Select white oaks	58.8	39.0	1.5
Sycamore	11.3	6.9	1.6
Pitch pine	3.9	2.2	1.7
Yellow-poplar	80.2	45.2	1.8
Hard maple	31.9	18.1	1.8
Ash	20.8	10.9	1.9
Hickory	41.5	20.5	2.0
Shortleaf pine	2.6	1.3	2.0
Soft maple	36.3	13.6	2.7
Sweetgum	9.9	3.6	2.8
Eastern hemlock	3.8	0.8	4.8
Loblolly pine	3.4	0.3	10.5

Source: million cubic feet. G/R Growth Removal ratio.
Forest Inventory and Analysis, Kentucky, 2003. USDA
Forest Service

Forest Resources of Kentucky

Key Challenges

“Forestry has been a step child of the agriculture industry.”

Don Gorton, Kentucky Forestland owners Association

Forest Economy

ISSUE -- Kentucky’s forest industry was hard hit by the 2001 recession. The forest industry in Kentucky will continue to be subject to the whims of demand, prices and business cycles and must readjust constantly to make a place for itself in the global marketplace.

CHALLENGE -- How do we increase the competitive posture of Kentucky’s wood industries in the global marketplace and promote diversity, growth and long-term development of both timber and nontimber forest-based economies without compromising the integrity of our forests.

Background

Kentucky is ranked in the top 5 states nationally in the production of hardwood lumber. Kentucky also ranks 2nd in the United States in hardwood exports and 6th in total wood exports.

The economic value of timber in Kentucky is significant, generating \$3.7 billion in economic impacts and employing 36,400 Kentuckians. Timber output in Kentucky reached record levels in 1999, but dropped back in 2001 due to the economic recession.

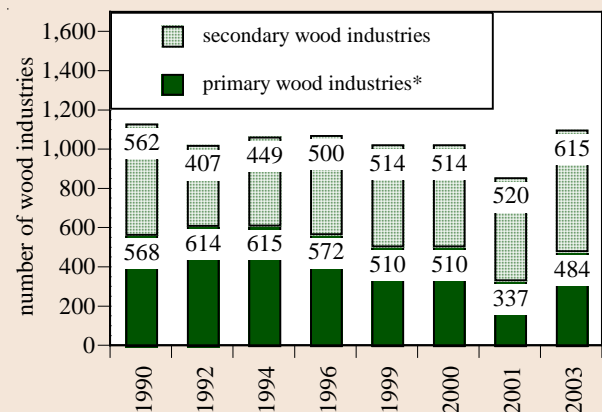
The primary wood industry in Kentucky was hard hit by the 2001 recession, losing some 173 firms between 2000 and 2001, based on a survey conducted by the Division of Forestry. A follow-up survey in 2003 revealed a rebound in the number of primary wood industries.

The secondary wood industry has seen a steady increase in the number of firms over the past few years. The outlook for secondary markets is mixed as the U.S. continues to lose its market share for furniture and other wood products. In addition, movement toward cheaper wood alternatives and recyclables, as well as paperless offices will impact growth of the secondary wood industry.

Statewide trends also reveal a steady decline in mill prices for sawlogs. For example, average white oak prices dropped 31 percent between 2001 and 2003. Average red oak prices have declined somewhat, dropping 17 percent between 2001 and 2003, while yellow-poplar fell 24 percent during this time period.

Private forests also provide many non-timber economic benefits. For example, in 2002 18 percent of the wild harvested Ginseng in the nation came from Kentucky. Nearly 22,000 pounds of Ginseng valued at \$7.5 million was exported from the state. Forest recreation also plays a major role in the state’s \$9.1 billion tourism industry. Other functions that a forest serves that are also not considered in traditional economic accounting includes clean air and water, abundant wildlife, as well as a growing source of energy.

Kentucky Primary and Secondary Forest Industry



Source: Ky. Division of Forestry

The Forest Resources of Kentucky

Key Challenges

Where is the incentive for people to invest in their forestland and to hold onto that land? Dr. Greg Khuns, forest landowner

Forest Stewardship

ISSUE -- Private landowners own about 89 percent of the 11.9 million acres of forestland in the state. Less than 5 percent of these lands have forest stewardship plans.

CHALLENGE -- How do we enable thousands of Kentucky landowners to actively manage their forests to be ecologically sustainable and economically rewarding.

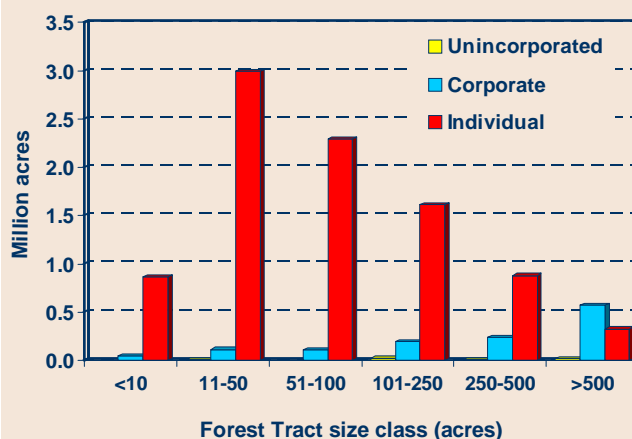
Background

There are more than 306,900 private forestland owners in Kentucky. These landowners own about 89 percent of the 11.9 million acres of forestland in the state. The average woodland tract is 26 acres.

Forestland owners are a diverse group of people motivated by multiple objectives. Most do not own forestland primarily for timber production and most do not actively practice forest management. Less than 5 percent of the 11.9 million acres of private forestland have forest stewardship plans. Between 1981 and 2003, 26,189 forest plans covering 2.34 million acres of forestland had been prepared.

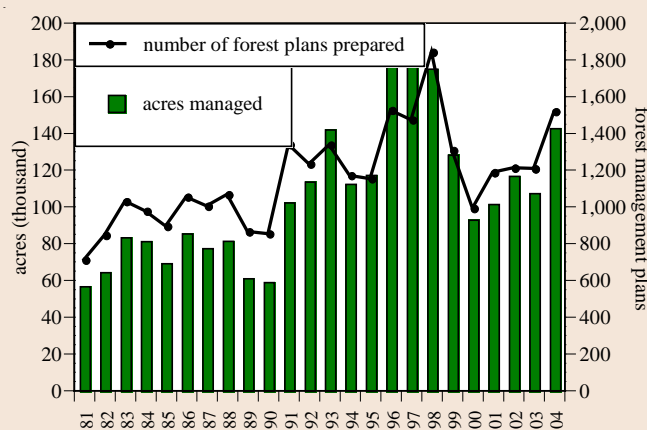
For many years, Kentucky has relied on federal cost-share money to assist landowners manage their timberland. This funding was reduced in 1995 and eliminated in 1999. In 2003, the federal Forest Land Enhancement Program was created under the 2002 Farm Bill. The program allows the state more flexibility in providing private nonindustrial forest landowners a means of managing their forest resources for diverse purposes. In 2003, Kentucky initially received \$558,841 in federal grant funds, of which \$316,352.12 was available to landowners for forestry practices. In 2004, Kentucky's share of federal grant funds was cut to \$115,000 and future program funding is in question due to budget cuts.

Forestland Ownership in Kentucky



Source: U.S. Forest Service

Forest Stewardship Plans in Kentucky



Source: Ky. Div. of Forestry

The Forest Resources of Kentucky

Key Challenges

“One of the biggest challenges is the health of the forest and how it affects productivity and integrity.” Dr. Deborah Hill, University of Kentucky, School of Forestry

Forest Health

ISSUE -- The impact of pests along with air pollution, wildfires, poor logging practices, exotic species and diseases continue to compromise forest productivity and quality in Kentucky.

CHALLENGE -- The challenge remains to closely monitor forest health and to design proactive strategies designed to prevent and combat these threats.

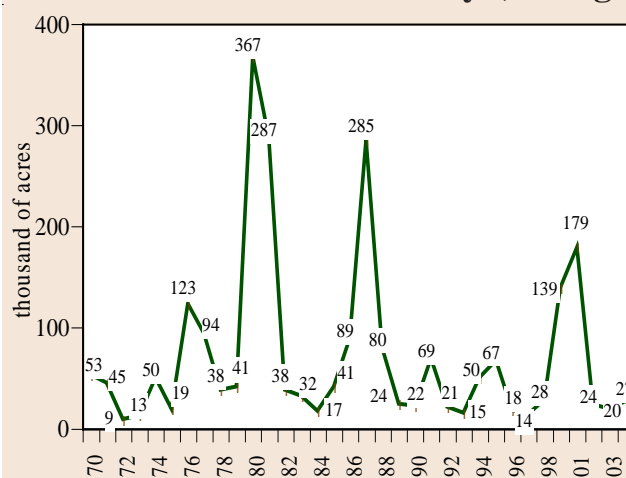
Background

Kentucky's forests face a number of threats from insect outbreaks to wild fires that continue to compromise the structure and health of our forests. The 2000-2001 outbreak of southern pine beetle has clearly demonstrated the impacts that pests can have on Kentucky forests. Aerial reconnaissance of the Daniel Boone National Forest revealed that up to 90 percent of the pine stands have been killed by the beetle. The impact of pests along with air pollution, wildfires, poor logging practices, exotic species and diseases can have a huge affect on forest productivity and quality.

Wildfires have long been among the greatest threats to the productivity of Kentucky's forests. For the past 10 years, the state has responded to an average of 1,483 wildfires per year that burned 67,343 acres annually. While wildfires occur in every county, the heavily forested eastern region leads the state with most burned acreage. Arson remains the leading cause of forest fires in Kentucky.

Kentucky forests are also threatened by a number of insect pests. The gypsy moth, *Lymantria dispar* Linnaeus, is one of the most notorious pests of hardwood trees in the northeastern U.S. Gypsy moth trapping is conducted across the state during late May through June. In 1999, gypsy moth captures peaked and have since been declining. The state has now turned its attention to other potential forest threats such as the emerald ash borer, an exotic species from Asia that feeds on ash trees; the hemlock wooly adelgid that originated in Japan and was introduced into the U.S. in the 1950s; and other exotic species such as bush honeysuckle and kudzu. In April 2004, the Kentucky Department of Agriculture asked the U.S. Department of Agriculture to place additional restrictions on nursery plant material coming from California into Kentucky in an effort to ward off Sudden Oak Death (SOD). No cases of sudden oak death have been confirmed in Kentucky but it has been discovered in 21 states, including Tennessee and Virginia. SOD is caused by a fungus-like pathogen. Spores infect oak trees through the trunk, gradually starving the root system. The only method of controlling the disease is to cut down and burn infected trees or plants.

Wildland Fires in Kentucky (acreage)



Source: Ky. Division of Forestry

The Forest Resources of Kentucky Actions

Actions

“How are changes affecting our forests? How do we achieve a balance between the growing need for wood fiber and the protection of the forest resource? What can we do to ensure our forests are productive, diverse and healthy?”

Lindell Ormsbee, Chair, EQC

The participants at the Forestry Roundtable discussed a number of needs and opportunities to sustain our forests and build a strong and vibrant forest economy in Kentucky. A majority of the discussion centered on these 7 key areas.

1. The Forest Industry -- How can the business climate be improved or enhanced for existing forest industries and how can new markets for our forest products be promoted.

2. The Forest Non-Timber Economy -- How do we recognize and promote the full value of forests to Kentuckians and support meaningful sustainable options for economic development.

3. Forestland Loss and Fragmentation -- What impacts are forestland loss and fragmentation having on the integrity and economic viability of our forests.

4. Forest Health and Sustainability -- How sustainable are our forests and how can we maintain forest health and biological diversity.

5. Information -- What are the critical information needs on which to base forest resource decisions.

6. Community-Based Forestry -- How do we give people a reason and a means to practice good stewardship.

7. Education and Leadership -- How can we better promote public awareness and appreciation for the full value of our forest resources.



The Forest Resources of Kentucky

Actions

1. THE FOREST INDUSTRY

Kentucky's lumber, paper and forestry economy were among the 10 highest percentage growth industries in the state by gross product between 1991 and 2001. The prospects for future short term growth in the forest products sector, however, will be challenging in light of moderate growth in domestic demand, rising international competition and movement toward wood alternatives. To remain competitive Kentucky must seek opportunities to revitalize its forest products industry so that it may remain competitive in the international marketplace through the next century while ensuring that future generations will have the abundant forests, diverse wildlife, and useful forest products that we enjoy today.

Kentucky's Ten Highest Percentage Growth Industries by Gross State Product (Current Dollars in Millions)

Industry	1991	2001	% change
Security and Commodity Brokers	\$105	\$603	474.3%
Motor Vehicles and Equipment	\$2,373	\$10,255	332.2%
Transportation by Air	\$770	\$2,351	205.3%
Business Services	\$1,344	\$3,599	167.8%
Social Services	\$267	\$698	161.4%
Lumber and Wood Products	\$252	\$572	127.0%
Paper and Allied Products	\$587	\$1,269	116.2%
Agricultural Services, Forestry, and Fishing	\$354	\$722	104.0%
Auto Repair, Services, and Parking	\$546	\$1,081	98.0%
Educational Services	\$297	\$585	97.0%

Source: United States Bureau of Economic Analysis

Note: Industries with \$500,000,000 or more in 2001 GSP.

ECONOMIC ACTION PLAN

Comment...Government economic policy in Kentucky is lacking legitimate focus on the forest industry.

Actions

- Commission a white paper on forest economy in Kentucky and future opportunities.
- Develop a short and long term action plan that considers policy implications to sustain the presence of the forest industry in the state within a sustainability framework.
- Prepare annual economic forecasts for Kentucky forest products sector.
- Add forest products to the "Made in Kentucky" state agricultural campaign.



The Forest Resources of Kentucky

Actions



WORKERS COMPENSATION REFORM

Comment...Workers compensation rates are higher in Kentucky than surrounding states like W. Virginia.

Actions

- Assess workers compensation rates related to forestry and identify specific actions for reform.

BUILD EXPERTISE

Comment....There is a great shortage of forestry economic analysis expertise in this state.

Actions

- Identify viable market opportunities which can be competitively produced and marketed by state manufacturers, develop basic business strategies for existing and new firms to successfully enter markets, and assist manufacturers in developing and implementing their marketing strategies.
- Promote research and development for Kentucky's forest product sector through a state forest research and markets consortium.
- Seek private support to endow a chair of forest economy at University of Kentucky School of Forestry or the Center for Business and Economic Research.
- Employ a forestry products development specialist within state government.

LOCAL VALUE ADDED MARKETS

Comment...We should invest in expanding value added local opportunities.

Actions

- Create a task force to study tax credits/incentives, venture capital funds and other opportunities to expand local value added forest product opportunities.

The Forest Resources of Kentucky

Actions

2. THE FOREST NON-TIMBER ECONOMY

The forest economy is much more than simply producing timber. Forests provide numerous products that fuel our economy including landscape and gardening products, environment and energy products, ecotourism and hunting and fishing values. These products are becoming increasingly important to our economy and quality of life.

It is important that the state recognize the forestry sector as an integral part of the health and the vitality of our economy through the provision of nontimber forest products.



INTEGRATE STATE POLICIES

Comment...Multipurpose use of our forestry resources should be actively developed and promoted.

Actions

- Facilitate closer integration and recognition of forestry in agriculture, recreation and tourism, and energy production policies and programs.
- Provide more appropriate and flexible taxation and financial incentives to support multipurpose forest uses.

MORE DIVERSE MARKETS

Comment...We need to consider alternative economic models for forestry.

Actions.

- Consideration of meaningful options for community economic development opportunities including agro-forestry products, energy products, recreation, environmental services and eco-tourism through demonstration projects, regional initiatives, feasibility studies and technical assistance and support.

NATURE TOURISM OPPORTUNITIES

Comment...There is a big potential for our forest lands to provide a basis for tourism. Other states have looked at this piece of the forest pie and done something about it. They out spend us 10 to 1.

Actions

- Inventory nature tourism attractions in Kentucky.
- Establish a strong nature tourism program within the Kentucky Department of Tourism.
- Promote regional/community strategic plans for nature tourism to maximize economic benefits and increase value added activity.
- Establish a stronger dialogue between government, producers and users to support short- and long-term regional marketing plans of nature tourism and recreation opportunities.

The Forest Resources of Kentucky

Actions

3. FORESTLAND LOSS AND FRAGMENTATION

The loss of 3 percent of Kentucky's forestland during the past 15 years is not considered a crisis but it has triggered attention and concern among forestry roundtable participants. At issue is the impact of forestland loss on the integrity, economic vitality and biological diversity of our forests. This outright loss is being compounded by the continual breakup of larger forest ownerships into smaller parcels. Smaller forest properties are expensive to manage as forests, whether to enhance for wildlife, reduce fuel loads or produce wood products. Kentucky must explore creative strategies to protect its unique forestlands while keeping its economic forests viable.



FORESTLAND DEVELOPMENT PRESSURES

Comment....The issue is how do we keep our economic forest intact.

Actions

- Identify key factors contributing to the loss of forestland such as low-density residential sprawl and conversion to other uses making forest resource use impractical.
- Assess the impacts of forestland loss on timber production, habitat and ecological diversity.

LAND USE PLANNING

Actions

- Promote a greater recognition of forests in land use planning policies at the state, county and local levels.
- Promote community awareness and attention to the role greenspace and forests play in protecting and enhancing environmental quality of the quality of life.

TAX REFORM

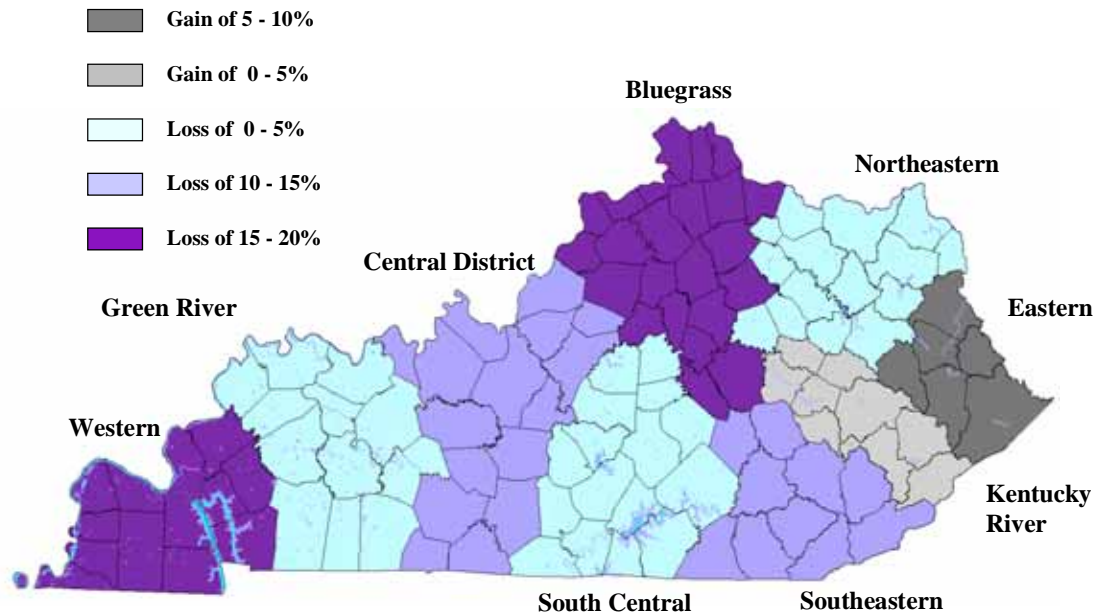
Comment....Woodland owners can expect to pay 60 to 115 percent of their forest income in taxes.

Actions

- Reform state estate tax laws to prevent involuntary liquidation and parcelization of family-owned forests when such lands are passed from one generation to the next.
- Adopt forest taxation systems that encourage long-term investment in sustainable forest management.

The Forest Resources of Kentucky Actions

Percent of Forestland Gain and Loss in Kentucky (1998-2003)*



**To be statistically valid counties were grouped into realistic geographic regions, the smallest group of counties a user could define would need at least one million acres of forestland to achieve acceptable results. As such counties have been grouped by Kentucky Division of Forestry Districts.*

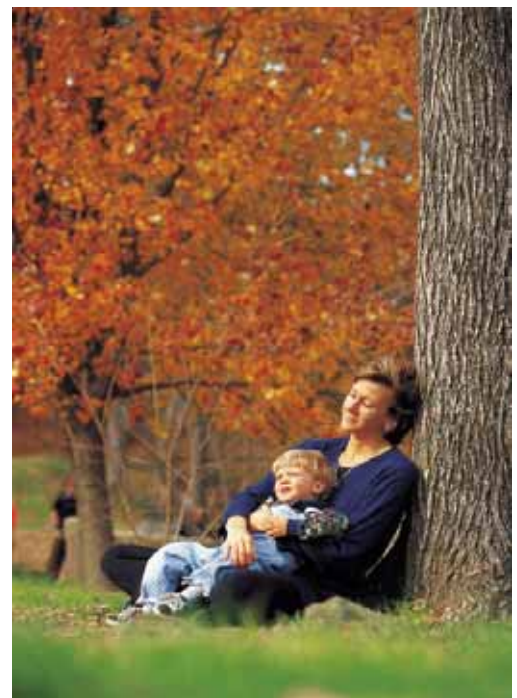
Source: U.S. Forest Service, Kentucky Forest Inventory, 2003.

FORESTLAND CONSERVATION AND PRESERVATION

Comment....Preservation of certain areas is essential.

Actions

- Explore forest conservation easements, which are being used across the United States, to conserve the public benefits of private forests while keeping them in productive use.
- Prioritize and target protection of high quality forestland through the Forest Legacy and other state and local conservation programs.
- Promote reforestation initiatives on mine land and retired farmlands through incentives and other means.



The Forest Resources of Kentucky

Actions

4. FOREST HEALTH AND SUSTAINABILITY

The past two decades have been a time of great change in the management of natural resources in Kentucky. The forest is now viewed as part of a larger ecosystem which is managed to protect and conserve a whole range of values and uses. Kentucky is now committed to the goal of sustainability based on considering social, economic and environmental values when planning and implementing forest management activities and providing people with jobs, recreational opportunities and a healthy, sustainable forest, now and in the future. How Kentucky achieves this goal will require a framework from which to monitor forest conditions and health in order to report on state's outcomes and performance in achieving sustainability.

INDICATORS OF SUSTAINABILITY

Comment....Before we can have a long term vision, we need a clear definition of what sustainable forests in Kentucky are.

Actions

- Adopt criteria and indicators to serve as a framework for discovering, discussing and measuring the sustainability of Kentucky's forests.
- Report on state and regional forest sustainability trends and indicators.
- Set benchmarks and utilize indicators to measure state performance and develop strategic plans.
- Hold annual forums on sustainability and forest health issues in the Commonwealth.

FOREST HEALTH ASSESSMENT

Comment....One of the biggest challenges is the health of the forest and how it affects productivity and integrity.

Actions

- Establish a permanent forest health advisory committee to monitor and report on forest health.
- Establish permanent forest watershed water quality monitoring in heavily logged watersheds.

PROCUREMENT POLICIES

Comment....State government is the largest purchaser of goods and it should buy sustainable forest products from Kentucky.

Actions

- Adopt a state procurement policy to support the purchase of sustainable forest products.
- Establish a state program to certify sustainably grown Kentucky lumber and forestry products.

WILDFIRES AND ARSON

Comment....People don't like to invest in woodlands because of fire.

Actions

- Conduct a comprehensive health assessment of the impacts of fire on private forestlands.
- Assess legal and jurisdictional issues and opportunities to provide for prosecution of arsonists.
- Establish community forestry committees and promote these as "models of success" to target arson and other forest issues.

The Forest Resources of Kentucky Actions

5. INFORMATION

Management of Kentucky's forest requires a sound knowledge of the many characteristics of the natural ecosystems in which forests grow, and their interaction with environmental and social objectives. Industry, community groups and government agencies need access to accurate and timely information about their forests to be able to make objective decisions now and into the future.



FOREST INVENTORY

Comment.... We need to look at a full range of our forest resources.

Actions

- Develop organizational capacity and processes to capture, preserve, share and integrate data, information and knowledge to support organizational goals, learning and adaptation.
- Design a statewide forest inventory that will achieve a greater understanding across the state regarding the ecological, economic and social interactions of the forest industry, the land and the people.
- Identify forestland ownership patterns and uses and utilize GIS layers to monitor changes.
- Provide public e-access to forest data and information.
- Develop tools to assist field users and other customers in the use of forest resource data and information.

FORECASTING SUPPLY AND DEMAND

Comment....If we decide what Kentucky forests should look like in 300 years it will be easier to develop a plan to get there.

Actions

- Develop short- and long-term sustainable yield forecasts based on current and projected utilization.

TIMELY INFORMATION FOR DECISION MAKING

Comment.....It is extremely frustrating to get good economic data or just basic information.

Actions

- Establish and maintain regional databases on the forest industry that would be accessible to all.
- Prepare subregional profiles of the forestry industry and related economic sectors to support specific projects and local integrated rural development initiatives.
- Continue to collect and publish timely mill price and timber product output information.
- Provide landowners with timely information on stumpage prices and harvesting trends.
- Strengthen public outreach and information through web sites, newsletters and targeted marketing.

The Forest Resources of Kentucky

Actions

6. COMMUNITY-BASED FORESTS

The number of nonindustrial private forest land owners makes it difficult to have any significant affect in promoting forest management in Kentucky. However, the management of these small woodlots are critical to ensuring the sustainability of Kentucky's forests. In the past, Kentucky has primarily relied on cost-share programs and direct technical assistance to promote proper forest management on private woodlands. Reductions in forestry agency funds and staff, however, will require a new perspective on how best to support the forest resource management needs of some 300,000 private woodland owners.



ENHANCE FOREST MANAGEMENT PROGRAMS

Comment...A key challenge to sustainable forest management among family forestland owners is to offer technical assistance and other programs with the greatest potential for success.

Actions

- Assess state forestry programs based on which are proving to be making a real difference to the local economy and to the objectives of multipurpose forestry.
- Provide long-term sustained funding to support to those initiatives that are successfully delivering against objectives.
- Increase efforts to effectively implement forest stewardship plans. This includes finding effective methods to link landowners together and with service providers.

COMMUNITY-BASED FORESTRY

- Explore ways of promoting community-based forestry programs including demonstration projects.
- Target grants and other resources to support forest landowner cooperatives to gain economies of scale and add value to their forestland.
- Target grants to help small landowners manage and market timber and forest nontimber resources.

PARTNERSHIPS AND INCENTIVES

- Review the need for a graduated property tax that provides disincentives for poor forest practices.
- Recognize and support community cooperatives and woodland stewards to help promote the basic concepts of stewardship and sustainable forest management.
- Build networks and partnerships among government agencies, private organizations, businesses and interest groups to maximize assistance and support to landowners.



The Forest Resources of Kentucky

Actions

7. EDUCATION AND LEADERSHIP

There is need to raise the public's awareness of the multiple benefits of forestry including economic and noneconomic values. Education is the basis for better understanding the role forests play in our lives. Public education and information along with hands-on opportunities will afford Kentuckians with the ability to look at our forest more holistically and support long-term sustained investment in our natural resources.

STRENGTHEN PUBLIC AWARENESS

Comment....Ignorance is our greatest challenge.

Actions

- Develop “Sustainable Forestry Public Education Campaign” for the general public to build awareness and support for sustainable forests.
- Conduct landowner surveys to identify issues, values and interests assess the relative value of different incentives and to improve effectiveness of technical assistance and education programs.
- Utilize the Internet, including websites, bulletin boards and chat rooms as an education outreach medium.
- Support community workshops and conferences that bring landowners and resource managers together to increase awareness of available management practices.
- Support teacher training and K-12 programs on forests and integrate forestry into curriculums and outdoor classrooms.
- Create a public education outreach campaign on wildland arson fires.
- Integrate forest management into the East and Central Kentucky PRIDE Initiatives.

PROMOTE LEADERSHIP

Comment....We need sustained leadership on the importance of forestry.

Actions

- Initiate a “forest dialogue” to engage policy, decision-makers and stakeholders in an ongoing discussion of forestry through annual conferences and forums.
- Strengthen the participation of CEOs and other high level forest industry officials in supporting forestry programs and initiatives in Kentucky.
- Create a strong and broad-based “Kentucky Forestry Alliance” to focus attention and lead a long-term collaborative effort, beginning with necessary investments to support sustainable forests.



The Forest Resources of Kentucky

Actions



HIGHER AND CONTINUING EDUCATION

Comment....Changes in the forests require adjustments in how we think about our forests.

Actions

- Strengthen logger training and build professional credentials by offering timber harvesting associate degree and other logger education courses, workshops and training.
- Provide for workforce training opportunities for emerging and expanding forest product industries.
- Make education and training in forestry and related industrial, environmental and leisure sectors more relevant to students' needs for the multipurpose forest agenda.
- Establish a state certification requirement for professional foresters.

RESEARCH AND DEVELOPMENT

Comment...By investing in forest research we are working to build a stronger future.

Actions

- Establish a long-term research and policy agenda to enable a diverse and growing forest industry.
- Create a "Kentucky Forest Research Center" to serve as a "think tank" for innovative research that will lead to more effective policies and regulations, enhance the value of timber and forest land assets and improve stewardship and market acceptability of Kentucky forest products.
- Produce focused and timely research reports and papers on forest issues in Kentucky.
- Conduct annual symposium in Kentucky on forest research and policy.

The Forest Resources of Kentucky Summary

Summary

“Our forests are the heart and soul of the commonwealth and it is up to us to make sure that there will be forest aplenty for all to enjoy”

LaJuana S. Wilcher, Secretary
Environmental and Public Protection Cabinet

The 2004 EQC Forest Roundtable provided a much needed public dialogue to review the status of forests in Kentucky. Critical among the discussion was:

LEADERSHIP... expanding the base of support for forestry through sustained leadership at the local, state and federal level.

VISION... a common vision of the multiple roles forests play in supporting a more vibrant local economies, improving the quality of life for communities and conserving the integrity of the state’s natural heritage.

INNOVATION... to promote new forest sector markets, support sustainable management and the retention and development of the existing forest industry.

DIALOGUE AND PARTNERSHIPS... a continuing forum for interested parties to work together to address issues and build consensus and collaboration.

INVESTMENT... public and private commitments and investments in communities that will move forestry forward into the next century.

EDUCATION... building public awareness and appreciation of the value of Kentucky’s forests.

The forests of Kentucky are resilient. They have been victim of abuse and neglect for centuries, yet they continue to provide us with numerous goods and services. We are now harvesting more timber than ever before. How we respond will determine the future of our forests, our rural character and the economy of our state. With innovation and scientific and technological ingenuity, we can meet the environmental, economic and recreational demands on our forests. Underlying all of this, however is a recognition by Kentucky’s citizens and decisionmakers of how important forests are to the future of our economy, our communities and our high quality of life.



The Forest Resources of Kentucky

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The Forest Resources of Kentucky

Appendix A: Roundtable Participants

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The Forest Resources of Kentucky

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The Forest Resources of Kentucky

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The Forest Resources of Kentucky

Appendix B: Roundtable Worksheets

Forest Threats Identified by Roundtable Members

First Priority

Succession of ownership incentives
 Loss of Forestland
 Incentive based ownership larger tracts
 Information on ecosystem services and economics
 Loss of forestland
 Conversion of forestland.. failure of land use policies
 Ignorance of general public about forest management
 Proper information to make decisions
 Adequate technical and financial assistance
 Education
 Loss of productive forestland to sprawl, other uses
 Lack of understanding and consensus on sustainable forests
 How do we convey economic value of forestland to producers
 Incentive for landowner to become more educated
 Loss and fragmentation of native forest
 Invasives
 Poor Forest Management Practices not based on knowledge
 Landowner education
 Fragmentation impacts to biodiversity – invasive species
 Education
 Viewed as a commodity more value
 Loss of landscape connectivity – fragment of habitats
 Forest ecological health
 Insects and disease
 Over abundant trees on DBNF more vulnerable to disease
 Lack of long-term vision of landowners
 Conversion of land incentive and disincentives
 Economics
 Education of landowners
 Lack of training and education to manage the forest - landowner
 Education and how to act responsibly...
 Lack of successful education programs
 Lack of public understanding
 Loss of forestland
 Out of state landowners lack of understanding of logging impacts
 Loss of forestland and fragmentation – bad planning
 Information – clear picture on resource and economics
 Differing values – education
 Lack of informed motivated landowner
 Understanding of values of forests
 Lack of outcry of public

Second Priority

What type of forest
 Economic viability of primary forest industry encouraging secondary
 Youth involvement
 Incentives and education landowner and industry
 Gov't policies in conflict with forest mgmt.
 Good public policy
 Wildfire
 wildfire
 Economic development policy
 Loss of cost share money
 Lack of awareness of importance of forest to economy
 Adequate technical expertise –
 Awareness and education about forests (economic, environment)
 Climate change Mountaintop removal and other mining, clearcut, roads
 Grazing practices
 Tax to help industry and landowners
 Economics driving land conversion
 Standing and growing timber economically viable
 Absentee ownership
 Integration of sciences
 Adequate funding for programs
 Lack of education and information – public and landowners
 Ability to Manage DBNF forests
 fragmentation
 Education
 Lack of local based forest resource opportunities
 Lack of technical resources
 Economic initiatives to promote ecotourism – compatible goals
 Conflicting government programs
 Fragmentation
 Current and projected harvest rates
 Lack of education and awareness (ecological, environmental)
 Education of general public, legislators,
 Education
 Economic motivation
 Lack of incentives

The Forest Resources of Kentucky

Appendix B: Roundtable Worksheets

Forest Barriers Identified by Roundtable Members

Barriers

Taxes

Issue - Forest management incentives

Forest health Reclamation of mineland

Lack of access to market info, price,

Insect and disease

General economics of state is barrier

No models of sustainability = need examples – demonstration in national state forests

Lack of management of private forestlands

coordinated educational program

Improve Value added opportunities

Barrier – lack of a vision Definition of forestland

Small tracts —

Good local wood products industry

Education and no resources to teach

Lack of Reference landscapes

Arson

Forest health

Barriers = Economics, ignorance, personal value systems

Lack of state policy of local small scale high value wood products

Insect and disease

Cultural attitudes

Barrier – lack of identity of timber apart from the land

Current prevailing silvicultural methods—even aged

Nature tourism and impacts of logging

Resources

Leadership

Education

Education



The Forest Resources of Kentucky

Appendix B: Roundtable Worksheets

Forest Roles and Responsibilities Identified by Roundtable Members

Government

Leadership
Cooperation
Communication
Ensure preservation is going on
government land
Federal – demonstrations
Research
Planning
Education
Funding programs
Documentation of logging
operations
Management mandates
Provide incentives for
management
Local programs such as Harlan
county ecotourism initiative
Jeff. County living forest
Greenspace
Urban communities
Extension service – on the
ground assistance
Parks and education
Local – land use planning

Landowner

Good Stewardship
Advocacy

Industry

Education
Gather market information
Consultation
Technical assistance

Citizen

Funding to support programs
Public funding
pay for sustainable forests

Other

Elementary education – education of youth values and
uses of forest

Future forest owner
organization

NGOs = Preservation of natural lands, conservation
easements



The Forest Resources of Kentucky

Appendix B: Roundtable Worksheets

Forest Needs and Actions Identified by Roundtable Members

Needs

Long term management
 Boom and bust mentality
 Landowners interested and active in forest management
 Large blocks of forestland
 Reduce the loss of forestland
 Increase awareness of threats
 Recognize changes in species composition
 Markets for all types of timber
 Sustained attention
 Long term management incentives
 Sustained leadership from policymakers
 Good science based management
 Funding – sustained services
 Long term partnerships and funding
 Communication tools
 Political will
 Clear definition of sustainable forest
 Value added industries
 Landowner support
 Punishment of arsonists
 Short and long term focus
 Updated forestry plan



Actions

Tax reform
 Reward management
 Workers compensation reform
 Landowners awareness campaign
 Proactive actions to protect forest from pathogens
 Funding for cost share and resources on a sustained basis
 Require land developers to mitigate or offset forest loss
 Forest indicators
 Economic strategy – graduated property tax, penalize cut and run, IRAs,
 Expand forest products act – for large scale timber removal – assessment of impact
 Leverage state money – purchase sustainable products
 Less fragmentation and more coordination
 Partnerships to leverage resources
 Executive branch and legislative commitment of resources - leadership
 Earmarked funds (sales tax)
 Raise hell!!!!!!! Higher priority
 Follow-up on authorized activities and prioritize or revisit or update on our vision and strategy
 Unified long term vision — challenge each organization to develop vision and identify common interests
 State procurement requirements to buy Kentucky made wood products
 Develop markets
 Assessment of how to promote value added industry
 Alternative economic models (i.e. tourism)
 Take arson cases out of local courts use open dump as example
 Invest resources in aggressively pursuing arsonists
 Partnerships with local prosecutors
 Pick high incendiary county – create a forestry council – empower local leaders and citizens – forest management overall with fire as subset
 Forestry strategy to focus on those areas where funding is not critical

